Public Health
Seattle & King County
HEALTHY PEOPLE. HEALTHY COMMUNITIES.

Alonzo L. Plough, Ph.D., MPH, *Director*

July 21, 2000

10118 LLC
ATT: Peter Most
10020 Main Street, Building A, #317
Bellevue, WA 98004

Dear Mr. Most:

Re: Site Hazard Assessment - (b) (6) Property Site

The King County Health Department has completed the site hazard assessment (SHA) of the (b) (6) Property site, as required under the Model Toxics Control Act. This site's hazard ranking, an estimation of the potential threat to human health and/or the environment relative to all other Washington state sites assessed at this time, has been determined to be a **5**, where 1 represents the highest relative risk and 5 the lowest.

For your information, Ecology will be publishing the ranking of this, and other recently assessed sites in the August 29, 2000 Special Issue of the Site Register. The site hazard ranking will be used in conjunction with other site-specific considerations in determining Ecology's priority for future actions.

Please contact me at (206) 296-4798 if you have any questions relating to the SHA of your site. If you have any inquiries/comments about the site scoring/ranking process, please call Michael Spencer at (360) 407-7195. For inquiries regarding any further activities at your site now that it is on Ecology's Hazardous Sites List, please call Louise Bardy at (425) 649-7209.

Sincerely,

Yolanda King, R.S.

Yolanda King, R.S.

YK:em

cc: Michael Spencer, Washington Department of Ecology
Louise Bardy, Washington Department of Ecology

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City of Seattle
Paul Schell, *Mayor*
King County
Ron Sims, *Executive*

SITE HAZARD ASSESSMENT
WORKSHEET 1
SUMMARY SCORE SHEET

Site Name/Location (Street, City, County, Section/Township/Range, TCP ID Number):

(b) (6) Property
10118 Des Moines Memorial Drive South
Seattle, WA 98168-5603
King County
T-23N, R-04E, Sec-04
TCP ID: N-17-5556-000
Longitude: 122* 18' 36.9"
Latitude: 47* 30' 46.46"
Site assessed for August 29, 2000 update

Site Description (Include management areas, substances of concern, and quantities):

The (b) (6) Property site is located in a residential area south of Seattle near the Duwamish River. The site property is bordered by Des Moines Memorial Drive South to the west and the eastern border, State Route 99, downgradient from the site. This 0.42-acre site is located in an area with municipal water and sewer systems. The site property had been used as a residence and a home auto repair shop. Currently, the house appears to be vacated and a majority of the solid waste that was present at the time of the initial investigation has been removed.

On June 3, 1994 and June 4, 1997, complaints were made to the Washington State Department of Ecology (Ecology) concerning the dumping of waste oil and used antifreeze into the ground creating a lot of stains visible in the bare soil. Also, there was a lot of solid waste on the site property. The Site Hazard Assessment team from the Public Health - Seattle & King County (PHSKC) performed the initial investigation on August 7, 1997. The investigators discovered six cars in various states of disrepair, several automotive batteries on the bare ground, and several areas of soil stained with motor oil and transmission fluid. Along the north side of the house, there was a van filled with garbage with a variety of solid wastes stacked between the driveway and the north property line. General rubbish such as wood waste and construction debris was scattered along the northern portion of the site. Due to a large amount of solid waste on the property at the time of the visit, it was uncertain what the full extent of the soil contamination had been.

Because there was confirmed soil contamination by petroleum products observed on the site, the (b) (6) Property site was added to the Integrated Site Information Systems (ISIS) list of confirmed and suspected contaminated sites on June 6, 1998. The site was confirmed for petroleum products and suspected for metals and organic conventional contaminants in the soil media. This site will be evaluated on its potential impacts to human health and the environment.

Yolanda King and Carsten Thomsen of the PHSKC conducted a site hazard assessment (SHA) visit on June 1, 2000 to sample the (b) (6) Property. PHSKC met with the property representative, Peter Most, who was present to witness the soil sampling. PHSKC observed various areas of stained soil on the north side of the driveway in the similar region as indicated in the initial investigation. Three sample locations were selected in this region situated in the northwest corner of the lot.

All three of the soil samples were taken at a depth of six to eight inches. The first soil sample was retrieved from an area that appeared to have some soil staining adjacent to the rock wall. A previous battery location near the driveway as indicated from the initial investigation is where the second sample was taken. The final soil sample was retrieved from the previous truck bed location as shown in a picture during the initial investigation where soil contamination from suspected petroleum products could be seen. All three soil samples were analyzed for Northwest Total Petroleum Hydrocarbons-Gasoline/Benzene, Toluene, Ethyl benzene, and Xylene (NWTPH-Gas/BTEX), Northwest Total Petroleum Hydrocarbons Diesel Extended (NWTPH-Dx), and total metals.

There was no NWTPH-Gas/BTEX or diesel fuel detected in any of the three soil samples. Most of the total metals were also not detectable in any of the three samples. Barium, chromium, and lead were among the only metals that were detected in the three soil samples, however they were all below the Model Toxics Control Act (MTCA) Method A cleanup levels. Heavy oil was present in all three samples with levels exceeding the current MTCA Method A cleaup level of 200 ppm (parts per million) for heavy oil as indicated in the table below.

	Heavy Oil (ppm)
Sample #1	1500
Sample #2	3400
Sample #3	730
MTCA Method A Cleanup Level	200

On the basis of this SHA, completed by the PHSKC's Environmental Health Division, this site will be scored for the surface water and groundwater routes only due to the fact that heavy oil has no toxicity related to the air route.

Special Considerations (Include limitations in site file data or data which cannot be accommodated in the model, but which are important in evaluating the risk associated with the site, or any other factor(s) overriding a decision of no further action for the site): N/A

ROUTE SCORES:

Surface Water/Human Health: 6.1

Surface Water/Environ.: NS

Air/Human Health: N/A

Air/Environmental: N/A

Ground Water/Human Health: 11.9

OVERALL RANK: 5

WORKSHEET 2
ROUTE DOCUMENTATION

1. SURFACE WATER ROUTE

List those substances to be considered for scoring: Source: 2

NWTPH-Heavy Oil

Explain basis for choice of substance(s) to be used in scoring.

The above substance concentration is above MTCA Method A Cleanup Standard.

List those management units to be considered for scoring: Source: 2,3

Soil contamination

Explain basis for choice of unit to be used in scoring. Source: 3

Surface soil is exposed to weather with no containment.

2. AIR ROUTE

List those substances to be considered for scoring: Source:

There will be no score for the air route.

Explain basis for choice of substance(s) to be used in scoring.

List those management units to be considered for scoring: Source:

Explain basis for choice of unit to be used in scoring. Source:

3. GROUND WATER ROUTE

List those substances to be considered for scoring: Source: 2

NWTPH-Heavy Oil

Explain basis for choice of substance(s) to be used in scoring.

The above substance concentration is above MTCA Method A Cleanup Standard.

List those management units to be considered for scoring: Source: 2,3

Soil contamination

Explain basis for choice of unit to be used in scoring. Source: 3

Surface soil is exposed to weather with no containment.

WORKSHEET 3
SURFACE WATER ROUTE

1.0 SUBSTANCE CHARACTERISTICS

1.1 Human Toxicity

Substance	Drinking Water Standard (ug/l)	Val.	Acute Toxicity (mg/kg-bw)	Val.	Chronic Toxicity (mg/kg/day)	Val.	Carcino-genicity WOE	PF*	Val.
1.NWTPH-Heavy Oil	ND	-	ND	-	2.0	1	ND	ND	-

*Potency Factor

Source:1
Highest Value:1
(Max.=10)

+2 Bonus Points? n/a

Final Toxicity Value: 1
(Max.=12)

1.2 Environmental Toxicity

( ) Freshwater
( ) Marine

Substance	Acute Water Quality Criteria (ug/l)	Value	Non-human Mammalian Acute Toxicity (mg/kg)	Value
1.NWTPH-Heavy Oil	ND	-	ND	-

Source:____ **Value: NS**
(Max.=10)

1.3 Substance Quantity: 600 sq ft Source: 2 **Value: 5**
(Max.=10)
Explain basis: stained area = 15'x 40'= 600 sq ft

2.0 MIGRATION POTENTIAL

2.1 Containment Source: 2 **Value: 10**
(Max.=10)
Explain basis: spill/discharge with no containment

2.2 Surface Soil Permeability: silty sand Source: 2 **Value: 3**
(Max.=7)

2.3 Total Annual Precipitation: 33.8 inches Source: 4 **Value: 3**
(Max.=5)

2.4 Max. 2-Yr/24-hour Precipitation: 1-2 inches Source: 4 **Value: 2**
(Max.=5)

2.5 Flood Plain: not in flood plain Source: 7 **Value: 0**
(Max.=2)

2.6 Terrain Slope: > 2 to 5 % Source: 3 **Value: 2**
(Max.=5)

WORKSHEET 3 (continued)
SURFACE WATER ROUTE

3.0 TARGETS

3.1 Distance to Surface Water: Duwamish River = 400 ft Source: 3 **Value: 10** (Max.=10)

3.2 Population Served within 2 miles (See WARM Scoring Manual Regarding Direction): pop = 0 Source: 5 **Value: 0** (Max.=75)

3.3 Area Irrigated within 2 miles (Refer to note in 3.2.): 0.75 no. acres = 0.75(sq rt 0) = 0 acres Source: 6 **Value: 0** (Max.=30)

3.4 Distance to Nearest Fishery Resource: N/A Source: _____ **Value: 0** (Max.=12)

3.5 Distance to, and Name(s) of, Nearest Sensitive Environment(s) 400 ft Duwamish River Source: 7 **Value: 12** (Max.=12)

4.0 RELEASE

Explain basis for scoring a release to surface water: none confirmed Source: 3 **Value: 0** (Max.=5)

WORKSHEET 4
GROUND WATER ROUTE

1.0 SUBSTANCE CHARACTERISTICS

1.1 Human Toxicity

Substance	Drinking Water Standard (ug/l)	Val.	Acute Toxicity (mg/kg-bw)	Val.	Chronic Toxicity (mg/kg/day)	Val.	WOE	Carcino-genicity PF*	Val.
1.NWTPH-Heavy Oil	ND	-	ND	-	2.0	1	ND	ND	-

*Potency Factor

Source: 1
Highest Value: 1
(Max.=10)

+2 Bonus Points?

Final Toxicity Value: 1
(Max.=10)

1.2 Mobility (Use numbers to refer to above listed substances)
Cations/Anions: 1= ; 2= ; 3= ; 4= ; 5= ; Source: 1 **Value: 0**
(Max.=3)

OR
Solubility(mg/l): 1 = < 10

1.3 Substance Quantity: 1,800 cu ft ÷ 27 = 66.7 cu yds Source: 2 **Value: 2**
Explain basis: 600 sq ft x 3' depth = 1,800 cu ft
(Max.=10)

2.0 MIGRATION POTENTIAL

2.1 Containment Source: 2 **Value: 10**
Explain basis: spill/discharge; no containment
(Max.=10)

2.2 Net Precipitation: 19.2 inches Source: 4 **Value: 2**
(Max.=5)

2.3 Subsurface Hydraulic Conductivity: silty sand Source: 2 **Value: 3**
(Max.=4)

2.4 Vertical Depth to Ground Water: 50 - 100 feet Source: 2 **Value: 4**
(Max.=8)

3.0 TARGETS

3.1 Ground Water Usage: public supply/alt source avail Source: 5 **Value: 4**
(Max.=10)

3.2 Distance to Nearest Drinking Water Well: 8,570 ft Source: 2 **Value: 1**
(Max.=5)

3.3 Population Served within 2 Miles: pop. > 10,000 Source: 2,5 **Value: 100**
(Max.=100)

3.4 Area Irrigated by (Groundwater) Wells within 2 miles: 0.75 no.acres = 0.75(sq rt 0) = 0 acres Source: 6 **Value: 0**
(Max.=100)

4.0 RELEASE

Explain basis for scoring a release to ground water: none confirmed Source: 2 **Value: 0**
(Max.=5)

SOURCES USED IN SCORING

1. Washington Ranking Method Toxicological Database
2. Analytical Results, (b) (6) Property, Onsite Environmental, Inc., June 1, 2000
3. Site Hazard Assessment, Public Health - Seattle & King County, August 29, 2000
4. Nation Weather Service Data
5. Washington State Department of Health Public Water Supply Listing
6. Washington State Water Use Data
7. Sensitive Areas Coverage, King County Geographic Information System Data

OnSite
Environmental Inc.
Analytical Testing and Mobile Laboratory Services

June 12, 2000

Carsten Thomsen
Seattle - King County
Department of Public Health
1st Interstate Center
999 3rd Avenue, Suite 700
Seattle, WA 98104-4099

Re: Analytical Data for Project (b) (6) Property
Laboratory Reference No. 0006-009

Dear Carsten:

Enclosed are the analytical results and associated quality control data for samples submitted on June 1, 2000.

The standard policy of OnSite Environmental Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: June 12, 2000
Samples Submitted: June 1, 2000
Lab Traveler: 06-009
Project: (b) (6) Property

NWTPH-G/BTEX

Date Extracted: 6-2-00
Date Analyzed: 6-3-00

Matrix: Soil
Units: mg/Kg (ppm)

Client ID:	**MP #1**			**MP #2**		
Lab ID:	06-009-01			06-009-02		
	Result	Flags	PQL	**Result**	Flags	PQL
Benzene	**ND**		0.057	**ND**		0.054
Toluene	**0.11**		0.057	**0.060**		0.054
Ethyl Benzene	**ND**		0.057	**ND**		0.054
m,p-Xylene	**ND**		0.057	**ND**		0.054
o-Xylene	**ND**		0.057	**ND**		0.054
TPH-Gas	**ND**		5.7	**ND**		5.4
Surrogate Recovery:						
Fluorobenzene	86%			80%		

Date of Report: June 12, 2000
Samples Submitted: June 1, 2000
Lab Traveler: 06-009
Project: (b) (6) Property

NWTPH-G/BTEX

Date Extracted: 6-2-00
Date Analyzed: 6-3-00

Matrix: Soil
Units: mg/Kg (ppm)

Client ID: **MP #3**
Lab ID: 06-009-03

	Result	Flags	PQL
Benzene	**ND**		0.055
Toluene	**0.063**		0.055
Ethyl Benzene	**ND**		0.055
m,p-Xylene	**ND**		0.055
o-Xylene	**ND**		0.055
TPH-Gas	**ND**		5.5

Surrogate Recovery:
Fluorobenzene 84%

Date of Report: June 12, 2000
Samples Submitted: June 1, 2000
Lab Traveler: 06-009
Project: (b) (6) Property

NWTPH-G/BTEX
METHOD BLANK QUALITY CONTROL

Date Extracted: 6-2-00
Date Analyzed: 6-2-00

Matrix: Soil
Units: mg/Kg (ppm)

Lab ID: MB0602S1

	Result	Flags	PQL
Benzene	**ND**		0.050
Toluene	**ND**		0.050
Ethyl Benzene	**ND**		0.050
m,p-Xylene	**ND**		0.050
o-Xylene	**ND**		0.050
TPH-Gas	**ND**		5.0

Surrogate Recovery:
Fluorobenzene 94%

Date of Report: June 12, 2000
Samples Submitted: June 1, 2000
Lab Traveler: 06-009
Project: (b) (6) i Property

NWTPH-G/BTEX
DUPLICATE QUALITY CONTROL

Date Extracted: 6-2-00
Date Analyzed: 6-3-00

Matrix: Soil
Units: mg/Kg (ppm)

Lab ID:	06-009-02 **Original**	06-009-02 **Duplicate**	**RPD**	**Flags**
Benzene	**ND**	**ND**	NA	
Toluene	**0.056**	**0.054**	4.9	
Ethyl Benzene	**ND**	**ND**	NA	
m,p-Xylene	**ND**	**ND**	NA	
o-Xylene	**ND**	**ND**	NA	
TPH-Gas	**ND**	**ND**	NA	
Surrogate Recovery:				
Fluorobenzene	80%	79%		

Date of Report: June 12, 2000
Samples Submitted: June 1, 2000
Lab Traveler: 06-009
Project: (b) (6) Property

NWTPH-G/BTEX
MS/MSD QUALITY CONTROL

Date Extracted: 6-2-00
Date Analyzed: 6-2-00

Matrix: Soil
Units: mg/Kg (ppm)

Spike Level: 1.00 ppm

Lab ID:	06-011-02 **MS**	Percent Recovery	06-011-02 **MSD**	Percent Recovery	**RPD**	**Flags**
Benzene	**0.842**	**84**	**0.840**	**84**	0.24	
Toluene	**0.883**	**83**	**0.853**	**80**	3.5	
Ethyl Benzene	**0.855**	**86**	**0.845**	**85**	1.2	
m,p-Xylene	**0.878**	**88**	**0.855**	**86**	2.6	
o-Xylene	**0.844**	**84**	**0.837**	**84**	0.89	

Surrogate Recovery:

Fluorobenzene	86%	86%

Date of Report: June 12, 2000
Samples Submitted: June 1, 2000
Lab Traveler: 06-009
Project: (b) (6) Property

NWTPH-Dx

Date Extracted: 6-2-00
Date Analyzed: 6-2-00

Matrix: Soil
Units: mg/Kg (ppm)

Client ID:	MP #1	MP #2	MP #3
Lab ID:	06-009-01	06-009-02	06-009-03
Diesel Fuel:	ND	ND	ND
PQL:	28	27	28
Heavy Oil:	1500	3400	730
PQL:	57	54	55
Surrogate Recovery:			
o-Terphenyl	87%	81%	82%
Flags:	X	X	X

Date of Report: June 12, 2000
Samples Submitted: June 1, 2000
Lab Traveler: 06-009
Project: (b) (6) Property

NWTPH-Dx
METHOD BLANK QUALITY CONTROL

Date Extracted:	6-2-00
Date Analyzed:	6-5-00
Matrix:	Soil
Units:	mg/Kg (ppm)
Lab ID:	MB0602S1
Diesel Fuel:	ND
PQL:	25
Heavy Oil:	ND
PQL:	50
Surrogate Recovery:	
o-Terphenyl	107%
Flags:	X

Date of Report: June 12, 2000
Samples Submitted: June 1, 2000
Lab Traveler: 06-009
Project: (b) (6) Property

NWTPH-Dx
DUPLICATE QUALITY CONTROL

Date Extracted:	6-2-00
Date Analyzed:	6-2-00
Matrix:	Soil
Units:	mg/Kg (ppm)

Lab ID:	05-211-07	05-211-07 DUP
Diesel Fuel:	ND	ND
PQL:	25	25
RPD:	N/A	
Surrogate Recovery:		
o-Terphenyl	82%	85%

Flags:

Date of Report: June 12, 2000
Samples Submitted: June 1, 2000
Lab Traveler: 06-009
Project: (b) (6) Property

TOTAL METALS
EPA 6010B/7471A

Date Extracted: 6-6&8-00
Date Analyzed: 6-6&8-00

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 06-009-01
Client ID: MP #1

Analyte	Method	Result	PQL
Arsenic	6010B	**ND**	11
Barium	6010B	**190**	2.8
Cadmium	6010B	**ND**	0.57
Chromium	6010B	**17**	0.57
Lead	6010B	**81**	5.7
Mercury	7471A	**ND**	0.28
Selenium	6010B	**ND**	11
Silver	6010B	**ND**	0.57

Date of Report: June 12, 2000
Samples Submitted: June 1, 2000
Lab Traveler: 06-009
Project: (b) (6) Property

TOTAL METALS
EPA 6010B/7471A

Date Extracted: 6-6&8-00
Date Analyzed: 6-6&8-00

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 06-009-02
Client ID: MP #2

Analyte	Method	Result	PQL
Arsenic	6010B	**ND**	11
Barium	6010B	**65**	2.7
Cadmium	6010B	**ND**	0.54
Chromium	6010B	**18**	0.54
Lead	6010B	**43**	5.4
Mercury	7471A	**ND**	0.27
Selenium	6010B	**ND**	11
Silver	6010B	**ND**	0.54

Date of Report: June 12, 2000
Samples Submitted: June 1, 2000
Lab Traveler: 06-009
Project: (b) (6) Property

TOTAL METALS
EPA 6010B/7471A

Date Extracted: 6-6&8-00
Date Analyzed: 6-6&8-00

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 06-009-03
Client ID: MP #3

Analyte	Method	Result	PQL
Arsenic	6010B	**ND**	11
Barium	6010B	**59**	2.7
Cadmium	6010B	**ND**	0.55
Chromium	6010B	**18**	0.55
Lead	6010B	**15**	5.5
Mercury	7471A	**ND**	0.27
Selenium	6010B	**ND**	11
Silver	6010B	**ND**	0.55

Date of Report: June 12, 2000
Samples Submitted: June 1, 2000
Lab Traveler: 06-009
Project: (b) (6) i Property

TOTAL METALS
EPA 6010B/7471A
METHOD BLANK QUALITY CONTROL

Date Extracted: 6-6-00
Date Analyzed: 6-6&8-00

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0606S1

Analyte	Method	Result	PQL
Arsenic	6010B	**ND**	10
Barium	6010B	**ND**	2.5
Cadmium	6010B	**ND**	0.50
Chromium	6010B	**ND**	0.50
Lead	6010B	**ND**	5.0
Selenium	6010B	**ND**	10
Silver	6010B	**ND**	0.50

Date of Report: June 12, 2000
Samples Submitted: June 1, 2000
Lab Traveler: 06-009
Project: (b) (6) Property

TOTAL METALS
EPA 6010B/7471A
METHOD BLANK QUALITY CONTROL

Date Extracted:	6-8-00
Date Analyzed:	6-8-00
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	MB0608S1

Analyte	Method	Result	PQL
Mercury	7471A	**ND**	0.25

Date of Report: June 12, 2000
Samples Submitted: June 1, 2000
Lab Traveler: 06-009
Project: (b) (6) Property

TOTAL METALS
EPA 6010B/7471A
DUPLICATE QUALITY CONTROL

Date Extracted: 6-6-00
Date Analyzed: 6-6&8-00

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 06-009-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	**ND**	**ND**	NA	10	
Barium	**166**	**192**	14	2.5	
Cadmium	**ND**	**ND**	NA	0.50	
Chromium	**14.9**	**18.0**	19	0.50	
Lead	**70.9**	**66.6**	6.3	5.0	
Selenium	**ND**	**ND**	NA	10	
Silver	**ND**	**ND**	NA	0.50	

Date of Report: June 12, 2000
Samples Submitted: June 1, 2000
Lab Traveler: 06-009
Project: (b) (6) Property

TOTAL METALS
EPA 6010B/7471A
DUPLICATE QUALITY CONTROL

Date Extracted: 6-8-00
Date Analyzed: 6-8-00

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 06-040-12

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	**ND**	**ND**	NA	0.25	

Date of Report: June 12, 2000
Samples Submitted: June 1, 2000
Lab Traveler: 06-009
Project: (b) (6) Property

TOTAL METALS
EPA 6010B/7471A
MS/MSD QUALITY CONTROL

Date Extracted: 6-6-00
Date Analyzed: 6-6&8-00

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 06-009-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	**92.1**	92	**88.7**	89	3.8	
Barium	100	**217**	50	**226**	60	4.2	
Cadmium	50	**44.7**	89	**43.6**	87	2.6	
Chromium	100	**105**	90	**103**	88	1.9	
Lead	250	**262**	77	**278**	83	5.8	
Selenium	100	**88.9**	89	**89.4**	89	0.56	
Silver	50	**43.7**	87	**43.8**	88	0.11	

Date of Report: June 12, 2000
Samples Submitted: June 1, 2000
Lab Traveler: 06-009
Project: (b) (6) Property

TOTAL METALS
EPA 6010B/7471A
MS/MSD QUALITY CONTROL

Date Extracted: 6-8-00
Date Analyzed: 6-8-00

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 06-040-12

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Mercury	1.0	**1.02**	102	**1.01**	101	1.2	

Date of Report: June 12, 2000
Samples Submitted: June 1, 2000
Lab Traveler: 06-009
Project (b) (6) Property

Date Analyzed: 6-2-00

% MOISTURE

Client ID	Lab ID	% Moisture
MP #1	06-009-01	12
MP #2	06-009-02	7.0
MP #3	06-009-03	9.0

OnSite Environmental Inc.

DATA QUALIFIERS AND ABBREVIATIONS

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

D - Data from 1:____ dilution.

E - The value reported exceeds the quantitation range, and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

G - Insufficient sample quantity for duplicate analysis.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeniety. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.

O - Hydrocarbons outside the defined gasoline range are present in the sample; NWTPH-Dx recommended.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a silica gel cleanup procedure.

Y - Sample extract treated with an acid cleanup procedure.

Z -

ND - Not Detected
MRL - Method Reporting Limit
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

OnSite Environmental Inc.
14648 NE 95th Street • Redmond, WA 98052
Fax: (425) 885-4603 • Phone: (425) 883-3881

Turnaround Request (in working days)

(Check One)

☐ Same Day ☐ 1 Day

☐ 2 Day ☐ 3 Day

☒ Standard
(Hydrocarbon analyses: 5 days, All other analyses: 7 days)

☐ 6/8 6/9
(other)

Project Chemist: DB

Laboratory No. 06-009

Company: King County Health

Project No.:

Project Name: (b) (6) Property

Project Manager: Kirsten Thomsen (206) 296-4830

Requested Analysis

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx	Volatiles by 8260B	Halogenated Volatiles by 8260B	Semivolatiles by 8270C	PAHs by 8270C	PCB's by 8082	Pesticides by 8081	Total RCRA Metals (8)	TCLP Metals	VPH	EPH	% Moisture
1	MP #1	06/01/00	11:00am	S	1		X	X							X				X
2	MP #2	06/01/00	11:10am	S	1		X	X							X				X
3	MP #3	06/01/00	11:15am	S	1		X	X							X				X

RELINQUISHED BY	DATE	RECEIVED BY	DATE
Yolanda King	06/01/00		6/1/00
FIRM: King County Health	TIME	FIRM: OSE	TIME: 1200
RELINQUISHED BY	DATE	RECEIVED BY	DATE
FIRM	TIME	FIRM	TIME

REVIEWED BY

DATE REVIEWED

COMMENTS:

Chromatographs with final report ☐

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